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(54) Label with Protective Laminate

(57) The invention concerns a self-adhesive label for post-labeling, with a field for labeling (4) and a transparent protective laminate (6), where the field for labeling (4) and the protective laminate (6) are both located on a common, at least in part transparent carrier (8). The label is characterized in that a first protective laminate (6) is provided as component of the carrier (8) and it can be removed from it along a perforation line (12).

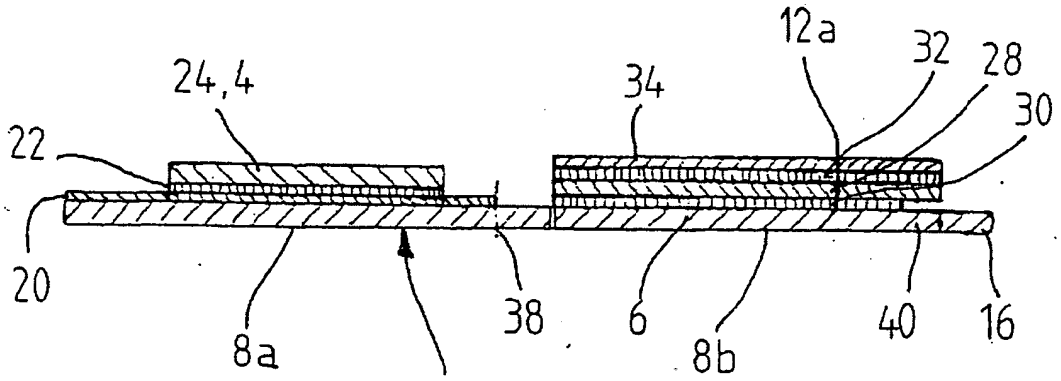

Fig. 2

Description

[0001] The invention concerns a self-adhesive label for post-labeling, with a field for labeling and thereto affixable an at least in part transparent protective laminate, where the labeling field and the protective laminate are located on a common, at least partially transparent carrier.

[0002] Such labels are known for instance from DE 197 49 632 C1 or DE 100 35 336.3.

[0003] Labels of the kind mentioned at the outset serve for the labeling of objects in areas of application which have higher demands on the stability of the labeling, for instance through the presence of aggressive agents or in that the object to be labeled is exposed to an additional protective or post-treatment. Under labeling within this context one can understand any form of marking of objects, in particular also a digital type face or else also a handwritten writing.

[0004] Meanwhile such labels are available in the form of prefabricated as rolled material, so that a later automatic labeling in printers, for example, thermal transfer printers, is unproblematic, where even short-notice changes of labeling jobs do not lead to a substantial production of reject fabricated material.

[0005] The tasks to that effect are solved satisfactorily by presently known labels in that the label is designed with two wings and that the labeling field as well as the protective laminate lie arranged next to one another, in one plane, and the protective laminate, made to overlap with the field for labeling by flipping over, can be mounted adhesively to an object by means of adhesive.

[0006] The known labels have, though, the disadvantage that at first they must be mounted to an expensive carrier material which is left over following the application of the label and is discarded as an excess of material, without being available for any further use. One furthermore has to put in a great expense into the application of the individual, different webs of material. Each new web of material must be applied adhesively onto the carrier or the preceding web, which furthermore can lead during their later separation from the carrier material to additional limitations in the manageability, for instance through the unintentional destruction of the laminate structure.

[0007] It is thus the object of the invention to improve a label of the kind mentioned at the outset with respect to the use and utilazibility of the material used and, herewith associated, with respect to the costs as well as with regard to a secure manageability free of failures.

[0008] The means for attaining the object are in that a first protective laminate is provided as component of the carrier material and designed to be removable from it along a perforation line.

[0009] According to the invention, the first protective laminate no longer presents itself as component of the label applied onto the carrier material, but rather is designed as part of the preferably monolayered carrier material, where after being removed from it only its margin areas remain standing and, after application onto the field for labeling, the laminate assumes its actual protective function for it. The simultaneous utilization of the first protective laminate as part of the carrier, under unrestricted functionality, considerably contributes towards saving material. Moreover, the portion of carrier material which is left over as scrap following the application of the label is reduced to the same extent, therefore stays abreast to the described extent with the aspect of avoiding waste.

Instead of a line created by a perforation one may also use a serration or punched line with holding points as the line along which the protective laminate is separated from the remainder of the carrier.

[0010] To begin with it is thereby advantageous to provide the first protective laminate for the permanent or temporary fastening on the field for labeling. Following application onto the field for labeling, the first protective laminate is separated out of the remaining carrier material and remains on the field for labeling in order to perform its function of protection against outside influences. A merely temporary design of the first protective laminate is also conceivable, so that solely the field of labeling is left behind following its separation.

[0011] In an advantageous development of the label according to the invention, the first protective laminate for the temporary fastening is provide on a second protective laminate located between this [first protective laminate] and the field for labeling, where the second protective laminated is then designed as permanent or temporary protective

laminate. In this case, the first protective laminate designed as constituent part of the carrier remains only temporarily on the composite which is formed by the field for labeling and the second protective laminate to be arranged on it. Following an intended post-treatment of the object onto which the label was to be placed, for instance a subsequent painting, the first protective laminate is pulled off the mentioned laminate, where due to the stepped adhesion between the two protective laminates and between the second protective laminate and the field for labeling, respectively, the field for labeling permanently provided with the second protective laminate remains on the object. In this case, similarly as with the embodiment with one protective laminate, also both protective laminates may be merely for the temporary application on the field for labeling, for instance if one has planned for a plurality of painting jobs.

[0012] It is thereby furthermore advantageous that the second protective laminate is embedded on both sides in layers of adhesive, where the layer of adhesive provided for the application onto the field for labeling adheres more strongly to the second protective laminate than the other layer of adhesive. The different adhesion of the adhesive layers may thereby be adjusted through the utilization of different adhesives which may also be, for example, consisting of multiple components. The stronger adhesion of the adhesive layer intended for application onto the field for labeling thereby ensures that the second protective laminate affixed to the field for labeling does not come off again unintentionally, together with other layers. A pointwise or linear application of adhesives is conceivable instead of a full-surface embedding of the second protective laminate.

[0013] Moreover, with one embodiment of the label according to the invention it is of advantage if the two protective laminates are temporarily bonded to one another via the adhesive layer adhering more strongly to the first protective laminate. To begin with, prior to application, the two laminates are arranged lying on top of one another on the same side of the carrier side and through the layer of adhesive remain in this arrangement even after application onto the field for labeling. In this way it is ensured that no shifting of the two protective laminates relative to one another occurs due to the process of affixing to the field for labeling. When removing the first protective laminate from the second protective laminate, now adhering to the field for labeling, the adhesive layer located between the laminates is also pulled off due to its lower adhesion to the second

protective laminate. The adhesive strength of the adhesive layer between the first and the second protective laminate is furthermore lower than the adhesive strength of the adhesive layer between the second protective laminate and the field for labeling, so that the second protective laminate is not pulled off, too, during the removal of the first protective laminate.

[0014] For this it is furthermore advantageous that the first protective laminate is provided with a tab for grasping, molded in one piece to it. By grasping the grasping tab, which as a part of the first protective laminate was also a component of the carrier and was removed from it along the perforation line, the first protective laminate can be removed from the field for labeling with the second protective laminate, fastened to an object, without great effort and without additional means. The grasping tab is thus also designed as component of the carrier, the same as the first protective laminate, so that one can avoid this part from remaining hanging or fluttering around, which could lead to undesired disturbances in the operating procedure in particular in printing units. By being in one piece one furthermore avoids that the first protective laminate could tear or be torn off in an undesired manner along a connecting line with the grasping tab or that the defined application of the protective laminate onto the field for labeling could be obstructed.

[0015] In an advantageous embodiment of the label according to the invention, the permanent or temporary protective laminate intended for application on the field for labeling has in the unapplied state a removable covering. Independent of whether the label is designed with one or two protective laminates, the covering is arranged by means of an adhesive layer on that surface which following application of the protective laminate or laminates comes to lie on the field for labeling. The covering serves in protecting the adhesive layer by means of which the laminate, when mounted, is to adhere on the field for labeling and may be produced without difficulties from entirely different materials suitable for their intended use, for instance foils, but also paper. In order for this covering to be removed particularly easily from the adhesive layer holding it against the permanent protective laminate it is preferably designed to be silicone-treated.

[0016] A desired savings in materials and lowering of the production costs is taken into consideration in an advantageous way in that when removing the first protective laminate